

Table 22.1  
Cancer of the Pancreas (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,  
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2002-11	2007-11
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2011</u>														
All Races	1975-78	-2.2	1978-84	1.3*	1984-89	-1.5	1989-01	0.0	2001-09	1.8*	2009-11	-2.0	0.9*	-0.1
White	1975-79	-1.9	1979-84	1.7	1984-87	-2.5	1987-99	-0.1	1999-09	1.6*	2009-11	-2.1	0.8	-0.3
Black	1975-11	-0.1											-0.1	-0.1
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2011</u>														
All Races	1992-01	0.0	2001-06	1.8*	2006-11	0.4							1.0*	0.4
White	1992-00	0.1	2000-09	1.4*	2009-11	-1.1							0.9	0.2
Black	1992-01	-1.5*	2001-11	0.9*									0.9*	0.9*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2011</u>														
All Races	1975-78	-2.2	1978-84	1.3*	1984-89	-1.5	1989-01	0.0	2001-09	1.7*	2009-11	-2.9	0.7	-0.6
White	1975-79	-1.9	1979-84	1.7	1984-87	-2.6	1987-99	-0.2	1999-09	1.6*	2009-11	-3.1	0.5	-0.8
Black	1975-11	-0.1											-0.1	-0.1
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2011</u>														
All Races	1992-00	-0.1	2000-09	1.3*	2009-11	-1.9							0.6	-0.3
White	1992-00	0.1	2000-09	1.4*	2009-11	-2.2							0.6	-0.4
White NH <sup>ef</sup>	1992-00	0.2	2000-09	1.5*	2009-11	-2.5							0.6	-0.6
Black	1992-00	-1.7*	2000-11	0.6									0.6	0.6
Black NH <sup>ef</sup>	1992-00	-1.7*	2000-11	0.7									0.7	0.7
API <sup>e</sup>	1992-11	0.7*											0.7*	0.7*
AI/AN <sup>eg</sup>	1992-97	18.4*	1997-11	0.3									0.3	0.3
Hispanic <sup>f</sup>	1992-11	0.6*											0.6*	0.6*
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2011</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2011</u>														
All Races														
White														
White NH <sup>ef</sup>														
Black														
Black NH <sup>ef</sup>														
API <sup>e</sup>														
AI/AN <sup>eg</sup>														
Hispanic <sup>f</sup>														

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.

Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

\* The APC/AAPC is significantly different from zero (p<.05).

- Joinpoint regression line analysis could not be performed on data series.

a  
b  
c  
d  
e  
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Table 22.2  
Cancer of the Pancreas (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,  
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2002-11	2007-11
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2011</u>														
All Races	1975-96	-0.8*	1996-11	1.0*									1.0*	1.0*
White	1975-94	-1.0*	1994-11	1.0*									1.0*	1.0*
Black	1975-11	-0.4*											-0.4*	-0.4*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2011</u>														
All Races	1992-01	0.0	2001-11	1.2*									1.2*	1.2*
White	1992-11	0.9*											0.9*	0.9*
Black	1992-11	-0.2											-0.2	-0.2
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2011</u>														
All Races	1975-93	-0.9*	1993-03	0.2	2003-07	2.6	2007-11	-0.6					0.9	-0.6
White	1975-81	-2.3*	1981-84	1.7	1984-93	-1.4*	1993-03	0.7*	2003-07	2.6	2007-11	-1.2	0.7	-1.2
Black	1975-11	-0.4*											-0.4*	-0.4*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2011</u>														
All Races	1992-03	0.0	2003-06	2.9	2006-11	0.0							1.0	0.0
White	1992-11	0.8*											0.8*	0.8*
White NH <sup>ef</sup>	1992-11	0.8*											0.8*	0.8*
Black	1992-11	-0.3											-0.3	-0.3
Black NH <sup>ef</sup>	1992-11	-0.2											-0.2	-0.2
API <sup>e</sup>	1992-11	0.1											0.1	0.1
AI/AN <sup>eg</sup>	1992-11	3.0*											3.0*	3.0*
Hispanic <sup>f</sup>	1992-11	1.1*											1.1*	1.1*
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2011</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2011</u>														
All Races														
White														
White NH <sup>ef</sup>														
Black														
Black NH <sup>ef</sup>														
API <sup>e</sup>														
AI/AN <sup>eg</sup>														
Hispanic <sup>f</sup>														

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.

Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

\* The APC/AAPC is significantly different from zero (p<.05).

- Joinpoint regression line analysis could not be performed on data series.

Table 22.3  
Cancer of the Pancreas (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,  
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2002-11	2007-11
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2011</u>														
All Races	1975-84	1.3*	1984-99	-0.3	1999-11	1.3*							1.3*	1.3*
White	1975-84	1.6*	1984-87	-2.0	1987-00	-0.1	2000-09	1.8*	2009-11	-2.7			0.8	-0.5
Black	1975-11	0.1											0.1	0.1
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2011</u>														
All Races	1992-99	-0.1	1999-11	1.1*									1.1*	1.1*
White	1992-00	-0.1	2000-09	1.6*	2009-11	-2.3							0.7	-0.4
Black	1992-11	-0.1											-0.1	-0.1
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2011</u>														
All Races	1975-84	1.3*	1984-00	-0.3*	2000-09	1.8*	2009-11	-3.7					0.6	-1.0
White	1975-84	1.2*	1984-99	-0.4*	1999-09	1.7*	2009-11	-3.7					0.5	-1.0
Black	1975-11	0.1											0.1	0.1
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2011</u>														
All Races	1992-00	-0.1	2000-09	1.4*	2009-11	-2.9							0.4	-0.8
White	1992-00	-0.1	2000-09	1.5*	2009-11	-3.5							0.4	-1.0
White NH <sup>ef</sup>	1992-00	-0.1	2000-09	1.7*	2009-11	-3.8							0.5	-1.0
Black	1992-11	-0.2											-0.2	-0.2
Black NH <sup>ef</sup>	1992-11	-0.1											-0.1	-0.1
API <sup>e</sup>	1992-11	1.2*											1.2*	1.2*
AI/AN <sup>eg</sup>	1992-11	1.1											1.1	1.1
Hispanic <sup>f</sup>	1992-11	0.2											0.2	0.2
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2011</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2011</u>														
All Races														
White														
White NH <sup>ef</sup>														
Black														
Black NH <sup>ef</sup>														
API <sup>e</sup>														
AI/AN <sup>eg</sup>														
Hispanic <sup>f</sup>														

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

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The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.

Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

\* The APC/AAPC is significantly different from zero (p<.05).

- Joinpoint regression line analysis could not be performed on data series.

Table 22.4  
Cancer of the Pancreas (Invasive)

Delay-adjusted SEER Incidence<sup>a</sup> Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Year of Diagnosis:</b>									
1975	11.84	15.63	9.12	11.70	15.66	8.89	15.90	18.08	13.91
1976	11.99	14.82	9.90	11.76	14.50	9.74	17.61	22.68	13.97
1977	11.90	14.81	9.83	11.62	14.57	9.54	17.12	19.44	15.25
1978	11.07	14.06	8.85	10.83	13.90	8.60	15.14	20.02	11.53
1979	11.52	14.15	9.65	11.21	13.84	9.39	16.08	19.14	13.68
1980	11.52	14.20	9.61	11.07	13.70	9.18	17.94	21.76	15.53
1981	11.68	13.54	10.17	11.39	13.26	9.91	17.18	20.86	14.10
1982	11.72	13.81	10.18	11.41	13.46	9.95	16.86	20.99	13.96
1983	12.19	14.66	10.44	11.75	14.07	10.12	18.13	23.05	14.90
1984	12.22	13.94	10.93	12.03	13.87	10.64	17.19	18.36	16.34
1985	12.10	14.35	10.50	11.70	13.60	10.34	18.80	25.28	14.55
1986	11.68	13.78	10.21	11.37	13.54	9.82	17.32	20.16	15.59
1987	11.60	13.81	10.10	11.09	13.38	9.54	18.32	18.98	17.78
1988	11.65	13.70	10.20	11.11	13.35	9.58	18.48	19.55	17.32
1989	11.33	12.89	10.07	10.98	12.66	9.63	15.03	16.12	14.00
1990	11.28	12.81	10.06	11.03	12.46	9.84	15.20	18.82	12.64
1991	11.40	12.90	10.23	11.04	12.61	9.79	17.06	18.20	16.25
1992	11.62	13.22	10.34	11.33	12.91	10.02	17.34	19.77	15.75
1993	10.97	12.55	9.70	10.51	11.98	9.30	16.98	18.90	15.33
1994	11.37	13.26	9.91	10.89	12.34	9.74	17.45	21.53	14.49
1995	11.14	12.73	9.97	10.71	12.31	9.57	18.12	20.32	16.31
1996	11.30	12.92	9.94	10.91	12.48	9.58	17.07	19.69	14.89
1997	11.49	13.08	10.18	11.04	12.58	9.74	17.84	19.36	16.49
1998	11.49	13.12	10.23	11.26	13.02	9.86	14.76	16.22	13.90
1999	11.11	12.59	9.84	10.72	12.24	9.36	16.71	19.54	14.71
2000	11.41	13.34	9.83	11.08	12.94	9.56	15.73	18.18	13.33
2001	11.34	13.18	10.00	11.08	13.09	9.55	14.27	15.48	13.35
2002	11.77	13.07	10.58	11.61	13.30	10.10	16.13	14.94	16.25
2003	11.66	12.91	10.62	11.44	12.70	10.36	16.16	17.13	15.44
2004	12.01	13.96	10.38	11.78	13.62	10.23	16.10	19.59	13.43
2005	12.08	13.79	10.69	11.78	13.49	10.35	17.09	18.47	16.41
2006	12.62	14.35	11.21	12.52	14.53	10.86	16.84	18.37	15.48
2007	12.51	14.44	10.93	12.37	14.47	10.63	15.55	16.35	14.83
2008	12.81	14.64	11.32	12.49	14.32	10.96	17.35	19.40	15.89
2009	13.17	14.79	11.84	12.90	14.57	11.54	17.51	20.51	15.19
2010	12.68	14.00	11.54	12.25	13.62	11.06	17.30	19.52	15.64
2011	12.63	14.75	10.93	12.37	14.43	10.67	16.49	18.34	15.09

Additional information on the model used to delay-adjust SEER Incidence rates can be found at (<http://surveillance.cancer.gov/delay/>).

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). - Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 22.5  
Cancer of the Pancreas (Invasive)

Age-adjusted SEER Incidence<sup>a</sup> Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Year of Diagnosis:</b>									
1975-2011	11.80	13.70	10.32	11.47	13.40	9.96	16.72	18.99	15.00
1975	11.84	15.63	9.12	11.70	15.66	8.89	15.90	18.08	13.91
1976	11.99	14.82	9.90	11.76	14.50	9.74	17.61	22.68	13.97
1977	11.90	14.81	9.83	11.62	14.57	9.54	17.12	19.44	15.25
1978	11.07	14.06	8.85	10.83	13.90	8.60	15.14	20.02	11.53
1979	11.52	14.15	9.65	11.21	13.84	9.39	16.08	19.14	13.68
1980	11.52	14.20	9.61	11.07	13.70	9.18	17.94	21.76	15.53
1981	11.68	13.54	10.17	11.39	13.26	9.91	17.18	20.86	14.10
1982	11.72	13.81	10.18	11.41	13.46	9.95	16.86	20.99	13.96
1983	12.19	14.66	10.44	11.75	14.07	10.12	18.13	23.05	14.90
1984	12.22	13.94	10.93	12.03	13.87	10.64	17.19	18.36	16.34
1985	12.10	14.35	10.50	11.70	13.60	10.34	18.80	25.28	14.55
1986	11.68	13.78	10.21	11.37	13.54	9.82	17.32	20.16	15.59
1987	11.60	13.81	10.09	11.09	13.38	9.54	18.32	18.98	17.78
1988	11.65	13.70	10.20	11.11	13.35	9.57	18.48	19.55	17.32
1989	11.33	12.88	10.07	10.98	12.66	9.63	15.02	16.12	14.00
1990	11.28	12.81	10.06	11.02	12.46	9.84	15.20	18.82	12.63
1991	11.40	12.90	10.23	11.04	12.61	9.79	17.06	18.20	16.24
1992	11.62	13.22	10.34	11.33	12.90	10.02	17.34	19.77	15.75
1993	10.97	12.54	9.70	10.51	11.98	9.30	16.97	18.90	15.33
1994	11.37	13.25	9.91	10.89	12.34	9.74	17.45	21.53	14.49
1995	11.13	12.72	9.96	10.71	12.31	9.57	18.11	20.31	16.31
1996	11.30	12.92	9.93	10.91	12.48	9.57	17.06	19.68	14.88
1997	11.48	13.07	10.18	11.03	12.57	9.73	17.83	19.35	16.48
1998	11.48	13.12	10.22	11.25	13.01	9.85	14.75	16.22	13.89
1999	11.10	12.58	9.83	10.71	12.23	9.35	16.70	19.53	14.69
2000	11.41	13.33	9.82	11.07	12.93	9.55	15.71	18.16	13.31
2001	11.33	13.17	9.99	11.06	13.08	9.54	14.26	15.46	13.33
2002	11.76	13.05	10.57	11.59	13.29	10.08	16.11	14.92	16.23
2003	11.64	12.89	10.60	11.42	12.68	10.34	16.13	17.10	15.40
2004	11.99	13.93	10.36	11.76	13.60	10.21	16.06	19.55	13.39
2005	12.05	13.76	10.66	11.75	13.46	10.32	17.04	18.42	16.36
2006	12.58	14.31	11.17	12.48	14.49	10.82	16.78	18.31	15.41
2007	12.46	14.39	10.88	12.31	14.41	10.57	15.48	16.28	14.75
2008	12.74	14.56	11.26	12.41	14.24	10.89	17.24	19.29	15.79
2009	13.08	14.70	11.75	12.81	14.47	11.44	17.37	20.37	15.06
2010	12.56	13.88	11.42	12.13	13.49	10.94	17.13	19.35	15.47
2011	12.30	14.38	10.62	12.02	14.05	10.35	16.02	17.87	14.63

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). - Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 22.7  
Cancer of the Pancreas (Invasive)

SEER Incidence<sup>a</sup> and U.S. Death<sup>b</sup> Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2007-2011									
All ages	12.3	14.0	10.9	12.2	14.0	10.7	15.6	17.2	14.2
Under 65	4.0	4.8	3.3	4.0	4.7	3.3	5.7	7.0	4.7
65 and over	69.5	77.6	63.3	69.2	78.2	62.3	83.4	88.1	80.2
All ages (IARC world std) <sup>c</sup>	7.4	8.6	6.4	7.3	8.5	6.3	9.7	11.0	8.6
Age-Specific Rates, 2007-2011									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	-	-	-	-	-	-	-	-
20-24	0.1	-	0.2	0.1	-	-	-	-	-
25-29	0.2	0.2	0.2	0.2	0.2	0.2	-	-	-
30-34	0.5	0.4	0.6	0.4	0.3	0.6	0.8	-	0.9
35-39	1.0	1.1	1.0	1.0	1.1	0.9	1.4	1.0	1.7
40-44	2.7	3.0	2.4	2.6	2.9	2.3	3.3	3.6	3.1
45-49	5.6	6.3	4.9	5.6	6.5	4.8	7.4	7.8	7.0
50-54	10.7	13.1	8.3	10.3	12.4	8.1	16.2	20.6	12.4
55-59	18.9	22.8	15.2	18.6	22.0	15.3	27.5	35.5	20.7
60-64	30.1	36.4	24.2	29.5	35.7	23.7	43.0	54.1	33.9
65-69	44.4	52.4	37.4	44.1	52.2	36.7	57.4	65.8	50.8
70-74	60.5	68.2	54.0	60.4	69.5	52.7	73.0	76.9	70.2
75-79	78.3	85.8	72.7	78.7	87.2	72.1	90.5	95.0	87.6
80-84	92.9	102.8	86.3	92.4	102.8	85.5	109.4	110.5	108.8
85+	101.2	109.5	97.1	99.8	109.2	95.1	120.1	122.0	119.4
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2007-2011									
All ages									
Under 65									
65 and over									
All ages (IARC world std) <sup>c</sup>									
Age-Specific Rates, 2007-2011									
<1									
1-4									
5-9									
10-14									
15-19									
20-24									
25-29									
30-34									
35-39									
40-44									
45-49									
50-54									
55-59									
60-64									
65-69									
70-74									
75-79									
80-84									
85+									

<sup>a</sup> SEER 18 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

<sup>b</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

<sup>c</sup> Rates are per 100,000 and are age-adjusted to the IARC world standard population.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 22.8  
Cancer of the Pancreas (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>5-Year Relative Survival (Percent)</b>									
<b>Year of Diagnosis:</b>									
1960-1963 <sup>a</sup>	-	-	-	1	1	2	1	0	3
1970-1973 <sup>a</sup>	-	-	-	2	2	2	2	0	3
1975-1977 <sup>b</sup>	2.5	2.6	2.2	2.5	2.7	2.3	2.3	2.5	1.9
1978-1980 <sup>b</sup>	2.8	2.7	3.0	2.5	2.6	2.5	5.6	4.1	7.0
1981-1983 <sup>b</sup>	2.7	2.4	3.1	2.5	2.1	3.0	3.6	3.7	3.2
1984-1986 <sup>b</sup>	2.9	2.3	3.5	2.6	2.1	3.1	4.7	3.9	5.3
1987-1989 <sup>b</sup>	3.5	3.3	3.7	3.2	3.1	3.3	5.5	5.1	5.8
1990-1992 <sup>b</sup>	4.3	4.1	4.5	4.4	4.2	4.5	3.6	3.2	4.0
1993-1995 <sup>b</sup>	3.9	3.6	4.3	3.9	3.5	4.2	3.6	3.3	3.7
1996-1998 <sup>b</sup>	4.4	4.6	4.1	4.1	4.7	3.6	3.4	3.1	3.5
1999-2003 <sup>b</sup>	5.2	5.2	5.3	5.3	5.6	5.1	4.5	3.0	5.8
2004-2010 <sup>b</sup>	7.2 <sup>f</sup>	7.0 <sup>f</sup>	7.4 <sup>f</sup>	7.2 <sup>f</sup>	6.9 <sup>f</sup>	7.4 <sup>f</sup>	6.7 <sup>f</sup>	7.6 <sup>f</sup>	5.9 <sup>f</sup>
<b>5-Year Period Survival (Percent)<sup>cd</sup></b>									
2010	7.2	7.0	7.4	7.2	7.0	7.3	6.3	6.8	6.0
<b>Stage Distribution (%) 2004-2010<sup>ce</sup></b>									
<b>All Stages</b>									
Number of cases	55,377	27,443	27,934	44,286	22,220	22,066	6,733	3,114	3,619
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	9	8	10	9	8	10	9	8	10
Regional	28	28	28	28	28	28	25	25	25
Distant	53	56	50	52	55	50	57	60	55
Unstaged	11	9	12	11	9	13	9	7	10
<b>5-Year Relative Survival (Percent), 2004-2010<sup>c</sup></b>									
<b>Age at Diagnosis:</b>									
Ages <45	25.1	20.4	30.9	25.4	21.5	30.6	22.9	15.9	30.0
Ages 45-54	11.1	9.7	13.1	11.0	9.4	13.4	11.0	10.9	11.5
Ages 55-64	7.4	6.3	8.9	7.6	6.6	8.9	5.1	3.4	7.4
Ages 65-74	6.1	5.7	6.6	6.2	5.6	6.8	4.5	4.1	4.7
Ages 75+	3.6	3.4	3.7	3.6	3.3	3.7	3.1	4.4	2.6
Ages <65	10.0	8.5	12.1	10.1	8.7	12.0	8.5	6.8	10.7
Ages 65+	4.6	4.5	4.7	4.6	4.4	4.8	3.8	4.3	3.5
<b>Stage<sup>e</sup>:</b>									
All Stages	6.7	6.3	7.0	6.6	6.3	6.9	6.1	5.8	6.3
Localized	25.8	25.0	26.3	25.0	24.7	25.0	22.5	18.3	24.8
Regional	9.9	9.9	9.9	10.2	10.0	10.2	9.6	11.1	8.3
Distant	2.3	2.3	2.3	2.3	2.4	2.2	1.5	1.3	1.7
Unstaged	4.4	4.3	4.4	3.7	3.4	4.0	7.9	9.6	6.9

<sup>a</sup> Based on End Results data from a series of hospital registries and one population-based registry.

<sup>b</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2011.

<sup>c</sup> SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

Based on follow-up of patients into 2011.

<sup>d</sup> Period survival provides a 2010 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2007-2009: 0-1 year survival), (2006-2008: 1-2 year survival), (2005-2007: 2-3 year survival), (2004-2006: 3-4 year survival), (2003-2005: 4-5 years survival).

<sup>e</sup> Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

The difference between 1975-1977 and 2004-2010 is statistically significant ( $p<.05$ ).

<sup>f</sup> The standard error is between 5 and 10 percentage points.

<sup>g</sup> The standard error is greater than 10 percentage points.

<sup>h</sup> Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 22.9  
Cancer of the Pancreas (Invasive)  
SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis  
All Races, Males and Females

	Year of Diagnosis																			
	1975– 1979	1980– 1984	1985– 1989	1990– 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Survival Time</b>																				
1-year	14.2	15.9	17.1	18.5	17.7	19.1	20.0	19.6	22.2	21.9	23.8	25.2	22.6	23.1	26.9	25.9	27.9	29.9	29.4	30.1
2-year	5.8	6.3	6.8	8.5	8.2	9.3	9.9	8.7	10.5	10.9	11.4	11.9	11.2	11.9	12.8	13.0	13.7	14.9	15.3	
3-year	3.6	4.1	4.7	5.8	5.2	6.3	7.1	5.6	6.5	7.3	7.3	8.4	7.4	8.3	8.8	9.2	9.6	10.2		
4-year	2.9	3.3	3.8	4.8	3.9	4.8	5.5	4.5	5.6	6.0	6.1	6.8	5.6	6.4	7.0	7.9	8.1			
5-year	2.5	2.8	3.3	4.2	3.6	4.2	5.0	3.8	5.1	5.1	5.0	6.2	4.8	5.5	6.1	7.3				
6-year	2.3	2.5	2.9	4.0	3.2	3.8	4.5	3.7	4.6	4.6	4.7	5.7	4.3	5.0	5.6					
7-year	2.1	2.3	2.7	3.6	3.1	3.5	4.3	3.4	4.3	4.2	4.1	5.1	4.0	4.7						
8-year	1.9	2.1	2.5	3.4	2.8	3.4	4.2	3.1	3.9	3.7	3.9	4.8	3.8							
9-year	1.8	2.0	2.2	3.2	2.7	3.3	4.0	2.8	3.8	3.6	3.8	4.7								
10-year	1.7	1.9	2.2	2.9	2.6	3.2	3.9	2.7	3.6	3.5	3.4									
11-year	1.7	1.8	2.1	2.8	2.5	2.9	3.8	2.5	3.3	3.5										
12-year	1.7	1.7	2.1	2.7	2.3	2.8	3.6	2.4	3.1											
13-year	1.6	1.6	2.0	2.6	2.2	2.6	3.3	2.3												
14-year	1.5	1.6	1.9	2.5	1.8	2.6	3.1													
15-year	1.5	1.5	1.8	2.3	1.7	2.6														
16-year	1.5	1.4	1.7	2.2	1.7															
17-year	1.4	1.4	1.7	2.2																
18-year	1.3	1.3	1.7																	
19-year	1.2	1.3	1.6																	
20-year	1.2	1.3	1.6																	

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 22.10  
Cancer of the Pancreas (Invasive)  
SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis  
  
All Races, Males

	Year of Diagnosis																			
	1975– 1979	1980– 1984	1985– 1989	1990– 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Survival Time</b>																				
1-year	14.2	15.1	16.8	17.9	16.8	20.0	21.3	19.4	22.7	22.0	23.3	24.9	24.0	25.2	25.9	27.3	28.3	31.4	29.0	29.7
2-year	5.8	5.9	6.2	8.4	7.2	10.9	9.9	9.2	9.8	11.4	12.1	11.1	11.3	12.5	11.8	13.6	13.7	15.9	15.9	15.9
3-year	3.4	3.8	4.4	5.8	4.0	7.1	7.0	5.6	5.9	7.1	7.9	8.1	7.2	8.1	7.7	9.7	9.1	11.2		
4-year	2.9	3.0	3.2	4.6	3.4	5.8	5.5	4.6	5.5	5.9	6.3	6.8	5.3	5.7	5.5	8.1	7.8			
5-year	2.5	2.5	2.9	4.0	2.9	5.1	4.7	4.0	4.9	5.2	5.4	6.0	4.2	4.9	5.0	7.4				
6-year	2.4	2.2	2.4	3.8	2.6	4.6	3.9	3.8	4.0	4.9	5.0	5.2	3.8	4.3	4.6					
7-year	2.3	1.9	2.3	3.4	2.6	4.2	3.4	3.5	3.9	4.5	4.5	4.7	3.5	3.8						
8-year	2.0	1.7	2.1	3.1	2.4	4.2	3.4	3.3	3.9	3.9	4.1	4.3	3.4							
9-year	1.9	1.6	1.8	3.0	2.2	4.0	3.4	2.9	3.6	3.7	4.0	4.2								
10-year	1.8	1.5	1.7	2.7	2.1	3.8	3.2	2.9	3.6	3.5	3.8									
11-year	1.7	1.5	1.6	2.6	2.0	3.2	2.9	2.9	3.2	3.5										
12-year	1.6	1.5	1.6	2.6	1.8	3.0	2.8	2.6	3.1											
13-year	1.6	1.4	1.5	2.5	1.7	3.0	2.6	2.6												
14-year	1.6	1.4	1.5	2.3	1.2	2.9	2.4													
15-year	1.6	1.3	1.3	2.3	1.2	2.8														
16-year	1.6	1.3	1.3	2.1	1.2															
17-year	1.4	1.3	1.3	2.0																
18-year	1.2	1.3	1.2																	
19-year	1.1	1.3	1.2																	
20-year	1.1	1.2	1.2																	

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 22.11  
Cancer of the Pancreas (Invasive)  
SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis  
All Races, Females

	Year of Diagnosis																			
	1975– 1979	1980– 1984	1985– 1989	1990– 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Survival Time</b>																				
1-year	14.2	16.8	17.4	19.2	18.6	18.3	18.9	19.9	21.7	21.7	24.3	25.5	21.3	20.9	27.9	24.6	27.4	28.4	29.8	30.6
2-year	5.9	6.6	7.3	8.7	9.1	7.9	9.9	8.3	11.1	10.4	10.8	12.7	11.2	11.3	13.9	12.5	13.8	13.9	14.6	
3-year	3.8	4.4	5.1	5.8	6.2	5.5	7.2	5.7	7.1	7.5	6.7	8.8	7.5	8.5	10.0	8.6	10.1	9.2		
4-year	3.0	3.6	4.3	4.9	4.4	3.9	5.5	4.3	5.8	6.1	5.8	6.8	5.9	7.1	8.6	7.6	8.4			
5-year	2.4	3.2	3.7	4.4	4.2	3.4	5.2	3.7	5.2	4.9	4.6	6.4	5.3	6.1	7.3	7.1				
6-year	2.3	2.9	3.4	4.1	3.7	3.0	4.9	3.7	5.0	4.2	4.3	6.1	4.8	5.7	6.6					
7-year	2.0	2.7	3.1	3.8	3.4	2.8	4.9	3.4	4.6	3.8	3.7	5.4	4.5	5.4						
8-year	1.8	2.5	2.8	3.7	3.0	2.6	4.9	2.8	4.0	3.6	3.5	5.2	4.2							
9-year	1.8	2.3	2.7	3.4	3.0	2.5	4.6	2.6	3.9	3.5	3.4	5.0								
10-year	1.7	2.2	2.6	3.2	2.9	2.5	4.6	2.4	3.6	3.4	3.0									
11-year	1.7	2.0	2.5	2.9	2.9	2.5	4.6	2.1	3.3	3.4										
12-year	1.7	1.9	2.5	2.7	2.8	2.5	4.3	2.1	3.2											
13-year	1.6	1.8	2.4	2.7	2.6	2.3	3.9	1.9												
14-year	1.5	1.7	2.4	2.6	2.4	2.3	3.8													
15-year	1.3	1.6	2.3	2.3	2.1	2.3														
16-year	1.3	1.5	2.0	2.3	2.0															
17-year	1.3	1.5	2.0	2.3																
18-year	1.3	1.4	2.0																	
19-year	1.3	1.4	2.0																	
20-year	1.3	1.4	1.9																	

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 22.15  
Cancer of the Pancreas (Invasive)

SEER Incidence and U.S. Mortality  
Age-Adjusted Rates and Trends<sup>a</sup>  
By Race/Ethnicity and Sex

SEER Incidence	SEER 18 Areas <sup>b</sup>			SEER 13 Areas <sup>b</sup>			SEER 9 Areas <sup>b</sup>		
	Rate 2007-2011			Trend 2002-2011 <sup>c</sup>			Trend 2002-2011 <sup>d</sup>		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	12.3	14.0	10.9	0.6	1.0	0.4	0.7	0.9	0.6
White	12.2	14.0	10.7	0.6	0.8*	0.4	0.5	0.7	0.5
White Hispanic <sup>e</sup>	11.6	12.7	10.6	0.7*	1.1*	0.2	-	-	-
White Non-Hispanic <sup>e</sup>	12.3	14.2	10.8	0.6	0.8*	0.5	-	-	-
Black	15.6	17.2	14.2	0.6	-0.3	-0.2	-0.1	-0.4*	0.1
Asian/Pacific Islander	9.7	10.7	8.9	0.7*	0.1	1.2*	-	-	-
Amer Ind/Alaska Nat <sup>f</sup>	10.7	12.6	9.1	-	-	-	-	-	-
Hispanic <sup>e</sup>	11.2	12.3	10.3	0.6*	1.1*	0.2	-	-	-
U.S. Mortality <sup>g</sup>	Rate 2007-2011			Trend 2002-2011 <sup>h</sup>			AAPC (%)		
RACE/ETHNICITY	Rate per 100,000 persons			Total			Total		
All Races	Total	Males	Females	Total	Males	Females	Total	Males	Females
White									
White Hispanic <sup>e</sup>									
White Non-Hispanic <sup>e</sup>									
Black									
Asian/Pacific Islander									
Amer Ind/Alaska Nat									
Total U.S.									
CHSDA Counties									
Non-CHSDA Counties									
Hispanic <sup>e</sup>									

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

a Trend based on less than 10 cases for at least one year within the time interval.

b Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

c The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta.

d The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry, and Rural Georgia.

e The SEER 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG.

f The 2002-2011 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2011.

g The 2002-2011 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2011.

h Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2007-2011 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, North Dakota, and South Carolina. The 2002-2011 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, South Carolina and Vermont.

i Incidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

j US Mortality Files, National Center for Health Statistics, CDC.

k The 2002-2011 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2011.

\* The APC is significantly different from zero ( $p < .05$ ).

Table 22.16  
Cancer of the Pancreas (Invasive)

Age-Adjusted SEER Incidence Rates<sup>a</sup>  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates<sup>a</sup>, 2007-2011</u>									
California	11.58	13.07	10.35	11.78	13.36	10.45	15.09	16.37	14.06
Greater Bay Area	12.08	13.85	10.60	12.47	14.55	10.68	15.97	16.27	15.62
San Francisco-Oakland	12.33	14.09	10.86	12.55	14.70	10.71	16.37	17.20	15.61
San Jose-Monterey	11.59	13.38	10.08	12.34	14.30	10.65	12.58	9.86	15.07
Los Angeles	11.21	12.58	10.11	11.27	12.83	9.98	15.07	16.14	14.25
Greater California	11.58	13.02	10.37	11.78	13.23	10.56	14.71	16.81	12.97
Connecticut	13.61	15.58	12.07	13.47	15.47	11.88	16.57	19.54	14.77
Detroit	15.00	17.12	13.34	13.99	16.17	12.24	19.68	22.31	17.82
Georgia	12.15	14.03	10.67	11.61	13.53	10.02	14.44	16.62	12.91
Atlanta	12.03	13.24	11.00	11.17	12.43	10.04	14.31	16.02	13.09
Rural Georgia	9.65	10.91	8.75	9.16	10.77	8.05	10.89	-	-
Greater Georgia	12.35	14.53	10.63	11.86	14.05	10.09	14.75	17.31	12.94
Hawaii	13.17	15.04	11.59	11.92	13.09	10.58	-	-	-
Iowa	12.02	14.07	10.31	11.92	13.92	10.25	19.56	24.68	13.90
Kentucky	12.22	14.23	10.55	12.11	14.18	10.39	15.03	16.46	13.71
Louisiana	13.31	14.68	12.01	12.78	14.39	11.26	15.13	16.01	14.15
New Jersey	13.46	15.46	11.81	13.45	15.55	11.70	15.80	17.28	14.56
New Mexico	10.27	11.88	8.90	10.19	11.68	8.91	-	-	-
Seattle-Puget Sound	12.76	14.34	11.44	12.86	14.44	11.56	15.12	16.45	13.13
Utah	10.29	11.72	9.07	10.26	11.73	9.00	-	-	-
9 SEER Areas <sup>b</sup>	12.62	14.38	11.18	12.33	14.13	10.83	16.65	18.65	15.13
11 SEER Areas <sup>b</sup>	12.25	13.93	10.88	12.11	13.87	10.65	16.19	17.87	14.90
13 SEER Areas <sup>b</sup>	12.25	13.93	10.88	12.10	13.86	10.64	16.11	17.78	14.84
18 SEER Areas <sup>b</sup>	12.30	13.99	10.90	12.20	13.96	10.73	15.57	17.24	14.23

<sup>a</sup> Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)  
<sup>b</sup> The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.  
The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.  
The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.  
The SEER 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG.  
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 22.21  
Cancer of the Pancreas (Invasive)

Estimated United States Cancer Prevalence Counts<sup>a</sup> on January 1, 2011  
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <19 <sup>e</sup>	0 to <36 <sup>e</sup>	>=36 <sup>g</sup>	Complete <sup>h</sup>
Race	Sex										
All Races <sup>b</sup>	Both Sexes	32,756	5,171	2,500	1,355	787	360	41,977	43,238	300	43,538
	Males	16,110	2,283	1,207	504	317	114	20,199	20,679	122	20,801
	Females	16,646	2,888	1,293	851	470	246	21,778	22,559	178	22,737
White <sup>b</sup>	Both Sexes	27,338	4,477	1,874	1,064	582	284	34,934	35,878	246	36,124
	Males	13,448	2,074	998	418	266	77	17,033	17,408	108	17,516
	Females	13,890	2,403	876	646	316	207	17,901	18,470	138	18,608
Black <sup>b</sup>	Both Sexes	3,789	469	383	142	173	38	4,791	5,039	123	5,162
	Males	1,965	133	129	0	52	26	2,227	2,316	54	2,370
	Females	1,824	336	254	142	121	12	2,564	2,723	69	2,792
Asian/ Pacific Islander <sup>c</sup>	Both Sexes	1,139	208	127	+	+	+	1,512	+	+	+
	Males	511	75	49	+	+	+	651	+	+	+
	Females	628	133	78	+	+	+	861	+	+	+
Hispanic <sup>d</sup>	Both Sexes	2,013	443	193	+	+	+	2,777	+	+	+
	Males	978	156	77	+	+	+	1,238	+	+	+
	Females	1,035	287	116	+	+	+	1,539	+	+	+

Estimated prevalence percent<sup>a</sup> on January 1, 2011, of the SEER<sup>c</sup> population diagnosed in the previous 19 years  
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	Age Specific (Crude)								Age-Adjusted <sup>f</sup>		
	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	
Race	Sex										
All Races <sup>c</sup>	Both Sexes	0.0122%	-	0.0002%	0.0008%	0.0018%	0.0065%	0.0176%	0.0392%	0.0598%	0.0588%
	Males	0.0119%	-	-	0.0005%	0.0013%	0.0069%	0.0192%	0.0436%	0.0615%	0.0597%
	Females	0.0124%	-	0.0003%	0.0011%	0.0023%	0.0060%	0.0161%	0.0353%	0.0585%	0.0582%
White <sup>c</sup>	Both Sexes	0.0127%	-	0.0002%	0.0007%	0.0018%	0.0065%	0.0172%	0.0398%	0.0601%	0.0579%
	Males	0.0126%	-	-	0.0004%	0.0012%	0.0070%	0.0195%	0.0444%	0.0633%	0.0593%
	Females	0.0128%	-	-	0.0010%	0.0024%	0.0060%	0.0149%	0.0355%	0.0574%	0.0570%
Black <sup>c</sup>	Both Sexes	0.0109%	-	-	0.0009%	0.0021%	0.0081%	0.0229%	0.0442%	0.0610%	0.0568%
	Males	0.0104%	-	-	-	0.0016%	0.0096%	0.0250%	0.0461%	0.0615%	0.0540%
	Females	0.0114%	-	-	-	0.0026%	0.0068%	0.0212%	0.0426%	0.0606%	0.0581%
Asian/ Pacific Islander <sup>c</sup>	Both Sexes	0.0103%	-	-	0.0009%	0.0015%	0.0045%	0.0156%	0.0309%	0.0558%	0.0612%
	Males	0.0091%	-	-	-	0.0017%	0.0038%	0.0135%	0.0360%	0.0519%	0.0583%
	Females	0.0113%	-	-	0.0016%	0.0013%	0.0051%	0.0175%	0.0268%	0.0588%	0.0629%
Hispanic <sup>d</sup>	Both Sexes	0.0056%	-	-	0.0007%	0.0013%	0.0048%	0.0122%	0.0306%	0.0441%	0.0674%
	Males	0.0049%	-	-	-	-	0.0053%	0.0133%	0.0291%	0.0486%	0.0521%
	Females	0.0063%	-	-	0.0009%	0.0022%	0.0043%	0.0111%	0.0318%	0.0408%	0.0765%

<sup>a</sup> US 2011 cancer prevalence counts are based on 2011 cancer prevalence proportions from the SEER registries and 1/1/2011 US population estimates based on the average of 2010 and 2011 population estimates from the US Bureau of the Census.

<sup>b c d</sup> Prevalence was calculated using the First Malignant Primary Only for a person.  
Statistics based on (b) SEER 9 Areas (c) SEER 11 Areas and Rural Georgia (d) NHIA for Hispanic for SEER 11 Areas and Rural Georgia.

<sup>e</sup> Maximum limited-duration prevalence: 36 years for 1975-2011 SEER 9 data; 19 years for 1992-2011 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

<sup>f g h i</sup> Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.  
(g) Cases diagnosed more than 36 years ago were estimated using the completeness index method (Capocaccia et al. 1997, Merrill et al. 2000). (h) Complete prevalence is obtained by summing 0 to <36 and >=36. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.

- Statistic not shown. Statistic based on fewer than 5 cases estimated alive in SEER for the time interval.  
+ Not available.

Table 22.22

## Cancer of the Pancreas (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2007-2011  
Both Sexes by Race

Histology <sup>a</sup>	All Races		White		Black		Asian/Pacific Islander		American Indian/Alaska Native <sup>b</sup>		Hispanic <sup>c</sup>	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	41,388	97.9%	33,185	97.9%	5,005	97.9%	2,825	97.8%	182	99.5%	4,079	97.5%
Epidermoid carcinoma <sup>d</sup> (8051-8131)	92	0.2%	70	0.2%	-	-	-	-	-	-	-	-
Adenocarcinoma <sup>e</sup>	36,359	86.0%	29,209	86.2%	4,358	85.3%	2,474	85.6%	158	86.3%	3,544	84.7%
Adenocarcinoma, NOS (8140)	29,528	69.9%	23,692	69.9%	3,614	70.7%	1,954	67.6%	137	74.9%	2,901	69.3%
Papillary adenocarcinoma, NOS (8260)	49	0.1%	40	0.1%	-	-	-	-	-	-	-	-
Mucinous adenocarcinoma (8480,8482)	1,096	2.6%	889	2.6%	119	2.3%	75	2.6%	-	-	109	2.6%
Mucin-producing adenocarcinoma (8481)	444	1.1%	365	1.1%	52	1.0%	25	0.9%	-	-	36	0.9%
Infiltrating duct carcinoma (8500-8503,8507,8514)	4,157	9.8%	3,361	9.9%	433	8.5%	337	11.7%	-	-	353	8.4%
Other adenocarcinoma <sup>f</sup>	1,085	2.6%	862	2.5%	135	2.6%	79	2.7%	-	-	138	3.3%
Other specific carcinomas <sup>g</sup>	2,749	6.5%	2,211	6.5%	314	6.1%	195	6.7%	-	-	283	6.8%
Islet cell carcinoma (8150-8155)	361	0.9%	302	0.9%	34	0.7%	22	0.8%	-	-	33	0.8%
Other carcinomas <sup>h</sup>	2,388	5.7%	1,909	5.6%	280	5.5%	173	6.0%	-	-	250	6.0%
Unspecified, "Carcinoma, NOS" (8010,8020-8022)	2,189	5.2%	1,696	5.0%	319	6.2%	150	5.2%	-	-	246	5.9%
Sarcoma and other soft tissue tumors <sup>i</sup>	30	0.1%	24	0.1%	-	-	-	-	-	-	-	-
Other specific types <sup>j</sup>	35	0.1%	26	0.1%	-	-	-	-	-	-	-	-
Unspecified (8000-8005)	809	1.9%	645	1.9%	94	1.8%	62	2.1%	-	-	96	2.3%
Total	42,264	100.0%	33,881	100.0%	5,112	100.0%	2,890	100.0%	183	100.0%	4,184	100.0%

Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

Percents may not sum to 100 due to rounding.

Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

Estimates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Epidermoid carcinoma includes squamous, basal, and transitional cell carcinomas.

Adenocarcinoma includes histologies 8050,8140-8147,8160-8162,8180-8221,8250-8507,8514,8520-8551,8560,8570-8574,8576,8940-8941.

Other adenocarcinoma include histologies 8050,8141-8147,8160-8162,8180-8221,8250-8259,8261-8479,8483-8499,8504-8506,8520-8551,8560,8570-8574,8576,8940-8941.

Other specific carcinomas include histologies 8012-8015,8030-8046,8150-8155,8170-8180,8230-8249,8508,8510-8513,8561-8562,8575,8580-8671.

Other carcinomas include histologies 8012-8015,8030-8046,8170-8180,8230-8249,8508,8510-8513,8561-8562,8575,8580-8671.

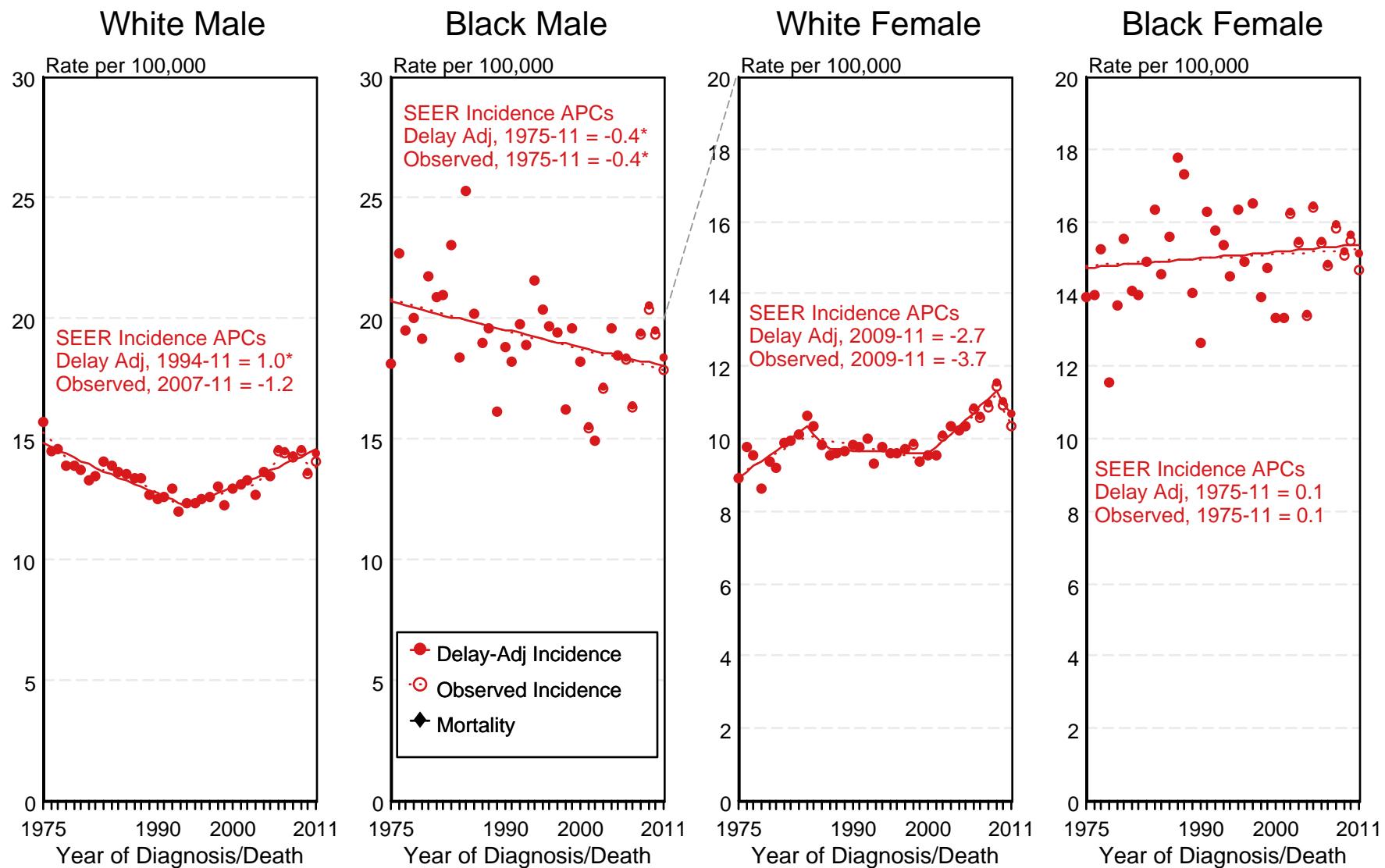
Sarcoma and other soft tissue tumors include histologies 8680-8713,8800-8921,8990-8991,9040-9044,9120-9136,9150-9252,9370-9373,9540-9582.

Other specific types include histologies 8720-8790,8930-8936,8950-9030,9060-9110,9260-9365,9380-9539.

Statistic not shown due to fewer than 16 cases during the time period.

Figure 22.1

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Pancreas, by Race and Sex



<sup>a</sup> Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

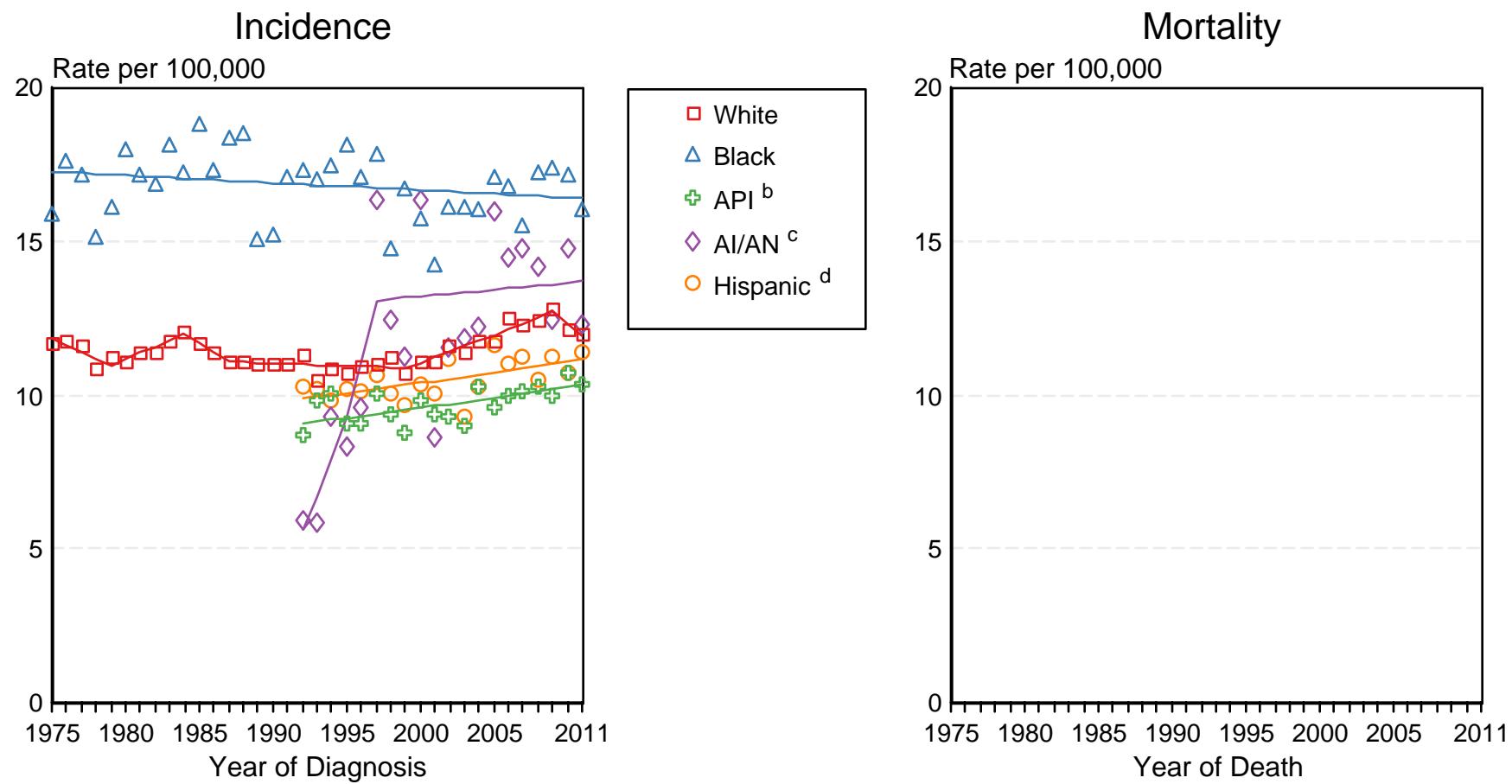
\* The APC is significantly different from zero ( $p < 0.05$ ).

Figure 22.2

# SEER Incidence and US Death Rates<sup>a</sup>

## Cancer of the Pancreas, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2011  
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2011



Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from US Mortality Files, National Center for Health Statistics, CDC.

<sup>a</sup> Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2011 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2011 allow a maximum of 3 joinpoints.

<sup>b</sup> API = Asian/Pacific Islander.

<sup>c</sup> AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

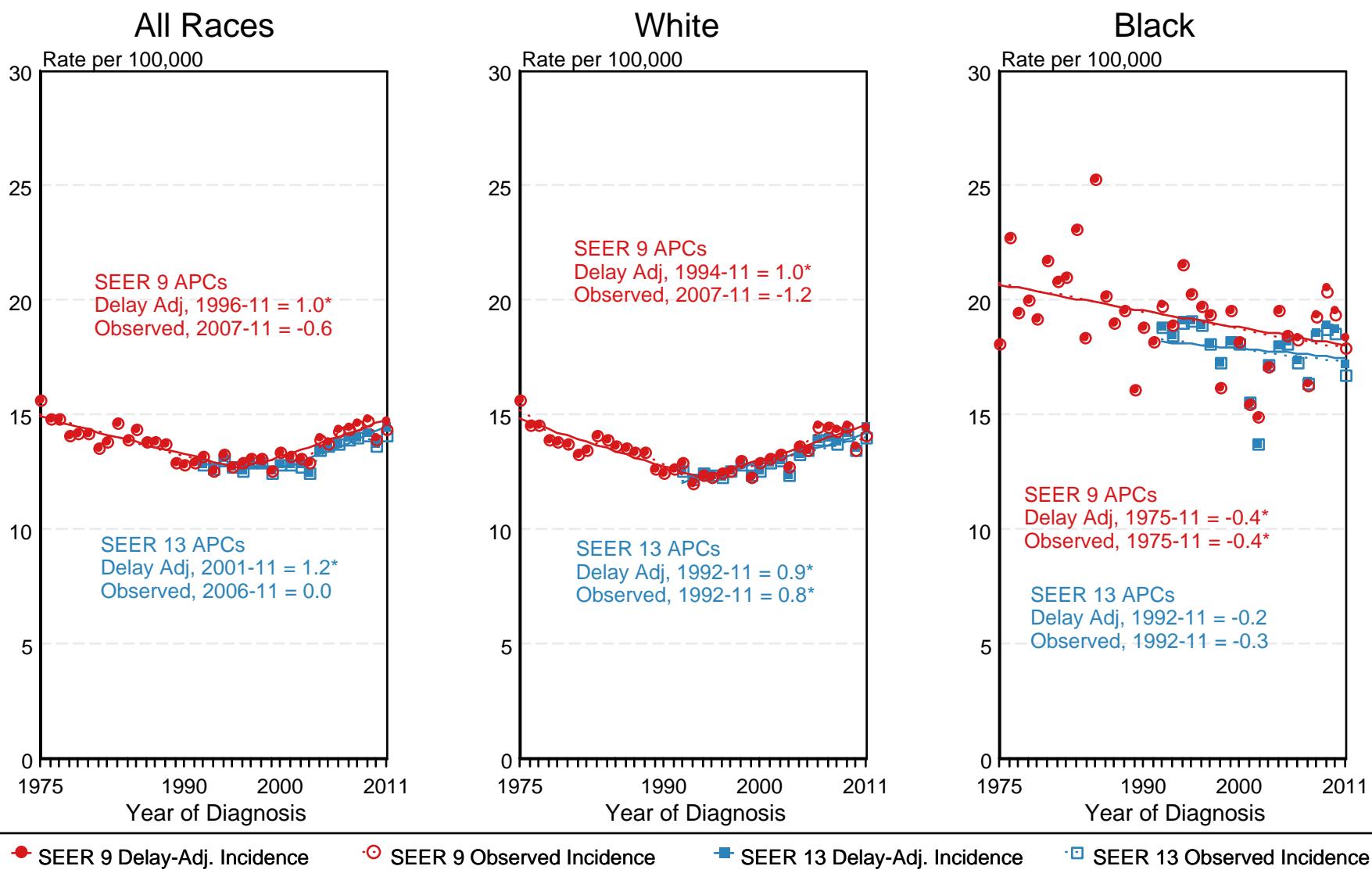
<sup>d</sup> Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, South Carolina, Oklahoma, and Vermont.

Figure 22.3

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates<sup>a</sup>

## SEER 9 Areas Compared to SEER 13 Areas

### Cancer of the Pancreas, Male, by Race

<sup>a</sup> Source: SEER 9 areas and SEER 13 areas.

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

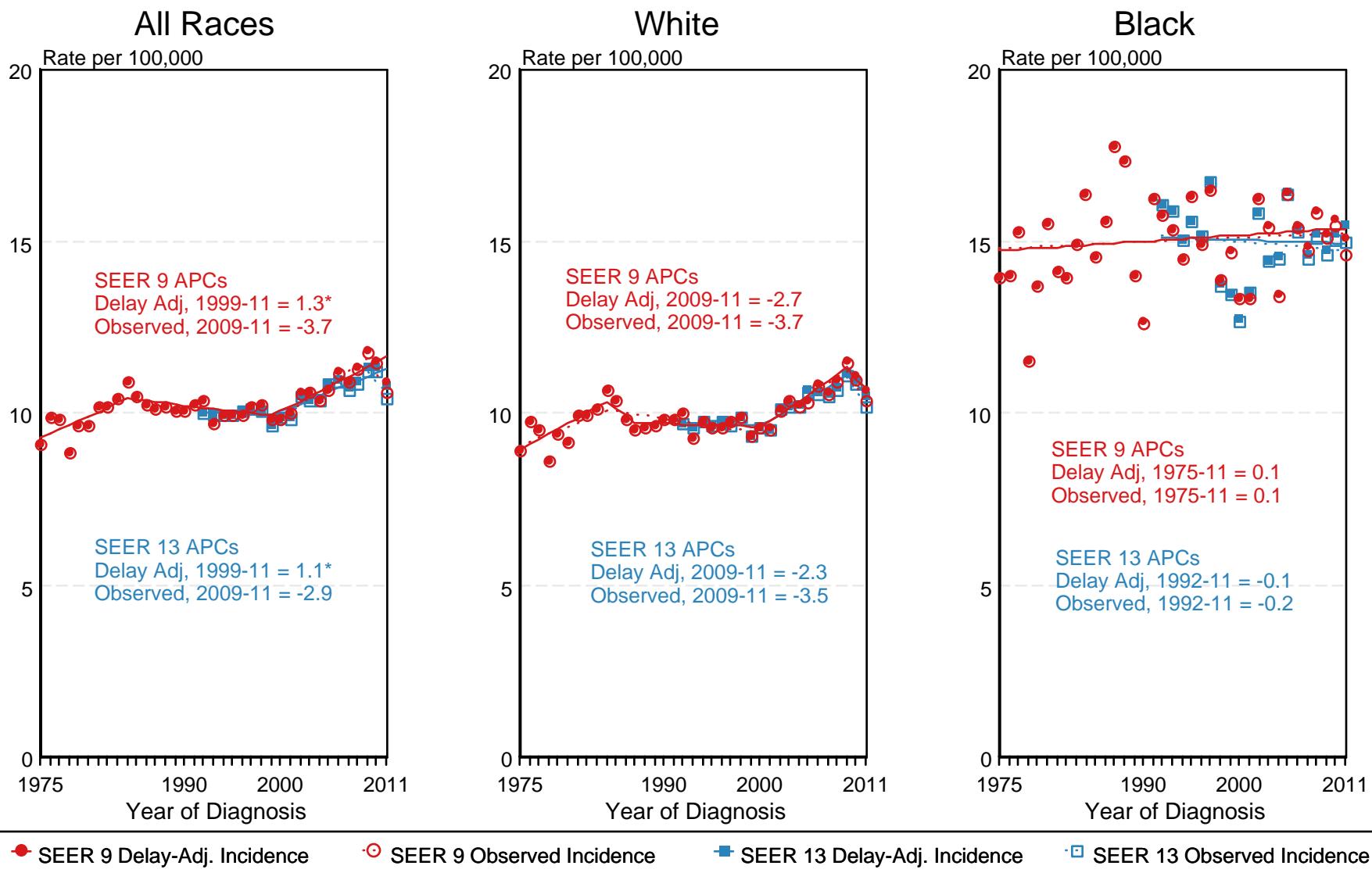
\* The APC is significantly different from zero ( $p < 0.05$ ).

Figure 22.4

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates<sup>a</sup>

## SEER 9 Areas Compared to SEER 13 Areas

### Cancer of the Pancreas, Female, by Race



<sup>a</sup> Source: SEER 9 areas and SEER 13 areas.

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

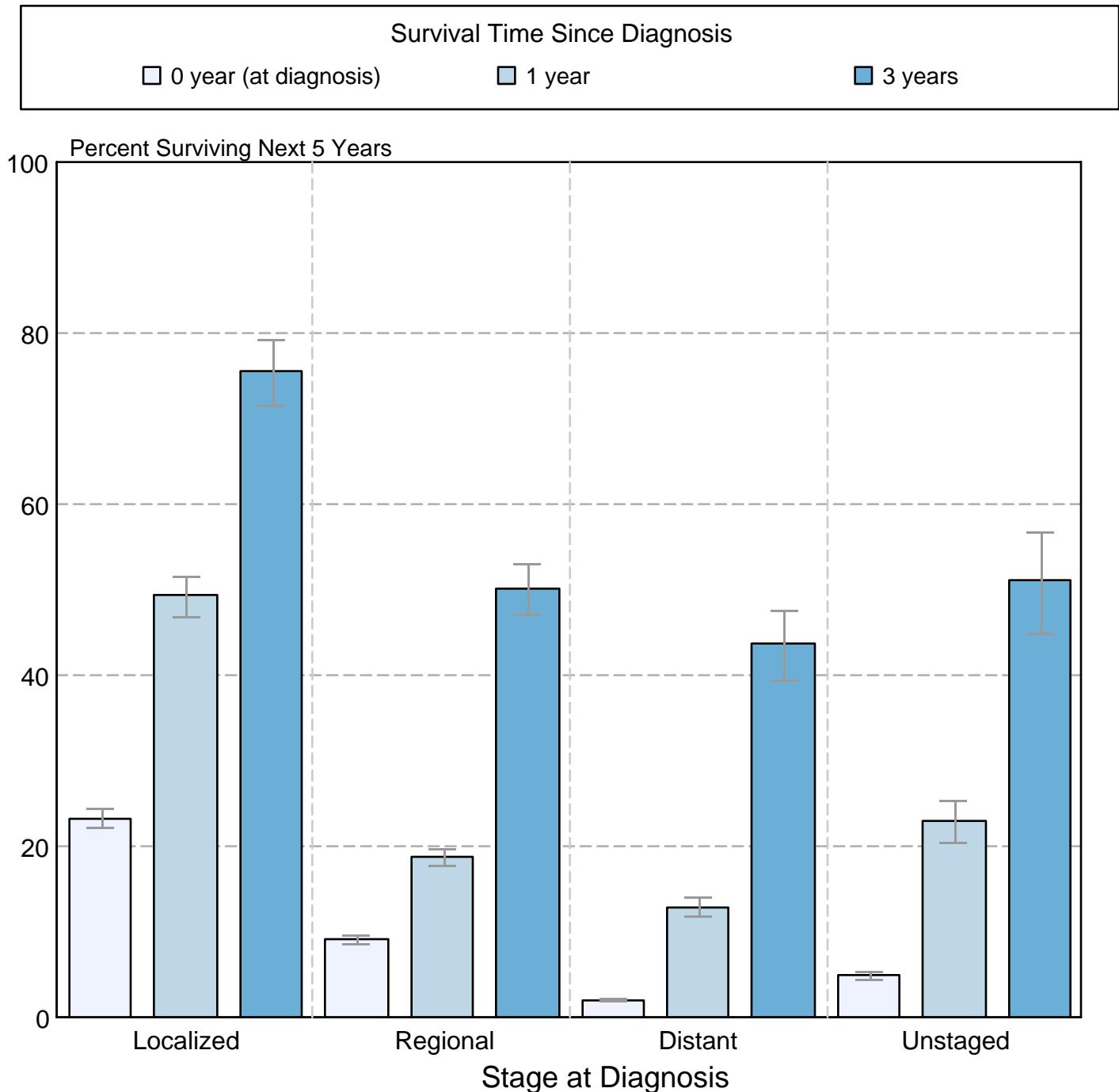
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

\* The APC is significantly different from zero ( $p < 0.05$ ).

Figure 22.5

**Cancer of the Pancreas**  
**5-Year SEER Conditional Relative Survival and**  
**95% Confidence Intervals**  
**Probability of surviving the next 5 years given the cohort**  
**has already survived 0, 1, or 3 years**  
**1998-2010 by stage at diagnosis**



Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG contribute cases for diagnosis years 2000-2009. The remaining 13 SEER Areas contribute cases for the entire period 1998-2010. Percent surviving is not shown if based on less than 25 cases. Confidence intervals are not shown if length of the confidence interval is greater than 5 times the standard error.